



Math-*Whizz*®

Teachers' Resource



Finding your way around Teachers' Resource

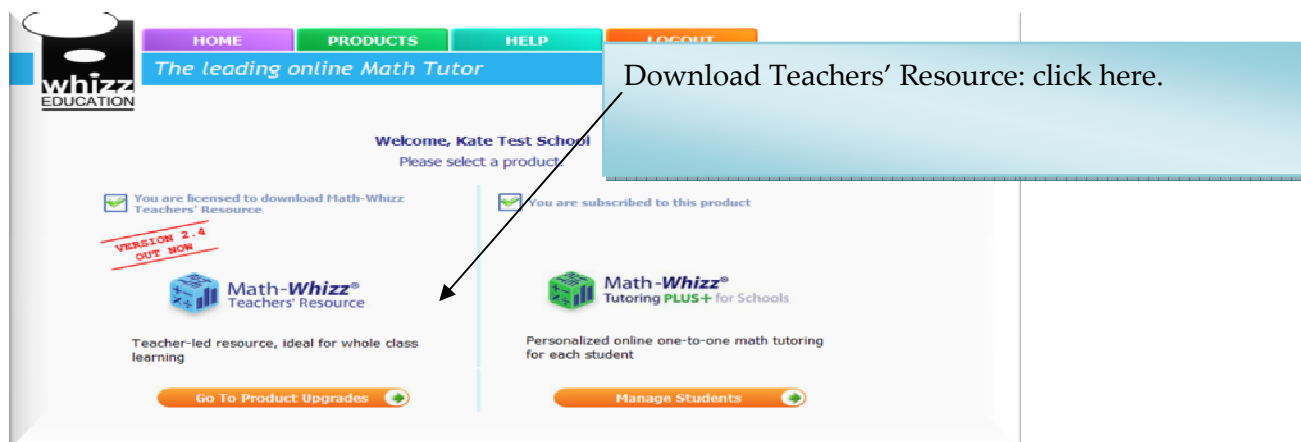
Math-Whizz® Teachers' Resource is designed for use in a whole-class teaching environment, small group instruction and 1:1 instruction using interactive whiteboards or projectors, and for individual student use on stand-alone PCs.

Engaging, interactive lessons and exercises motivate students to learn and practice key mathematical skills and provide comprehensive coverage of the West Virginia Content Standards and Objectives.

Over 1200 lessons, worksheets and collaborative classroom exercises are available to instructors to unitize during instruction. Because every student comes to class with different background knowledge and skill levels, Math-Whizz makes it easy for teachers to assign lessons and activities that are specific to each student. Teachers have access to ALL content, K-8 in the Teachers' Resource regardless of what grade they teach.

Accessing the Teachers' Resource

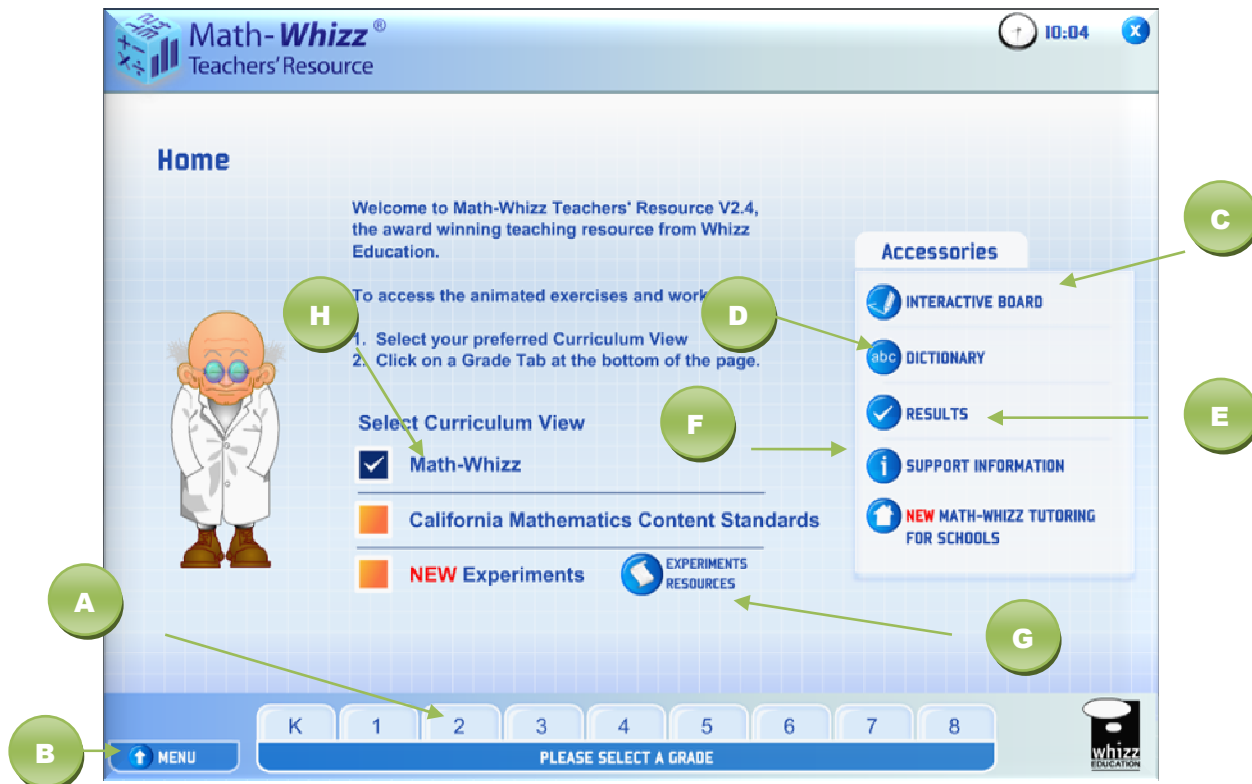
Follow the same log in process to access Math-Whizz Classroom Management tool. Click on 'Go To Product Upgrades' to download Teachers' Resource. Follow the instructions for downloading.



NOTE: TEACHERS' RESOURCE ONLY NEEDS TO BE INSTALLED ONCE. YOU CAN CHOOSE TO INSTALL A DESKTOP ICON FOR EASY ACCESS.

Home page

The Homepage provides instructors with easy access to Math-Whizz's instructional resources. You can quickly and easily move through the main home page with simple mouse clicks.



A	Curriculum Levels: Teachers can maneuver around levels, choosing lessons to present.	E	Results: Teachers can view results from class exercises.
B	The menu button will display the options menu at any time.	F	Support Information: Download full users guide to the Teachers' Resource.
C	Interactive Board: Used to create interactive lessons	G	Experiments: Collaborative Classroom lessons that teachers can customize to needs of students/class.
D	Interactive Dictionary: includes nearly 600 math terms.	H	Curriculum View

Finding your way around Teachers' Resource

Levels

From the **Home Page**:

1. Select **Math-Whizz** as your preferred **Curriculum View**.
2. Click on the Grade Tab



A

Each Topic is split by objectives or into four teaching levels: A, B, C and D. Each level is intended to achieve a logical progression between exercises. For example, key concepts learned in Level A will normally be used and built upon in Level B and subsequent levels. Objectives are Correlated to Kentucky standards

B

Exercises icon will lead you into the Interactive Lesson/Exercise. These can be delivered via interactive white board, computer lab, stand alone computer, or projector. Teachers can skip the tutorial section of the lesson and go directly to the exercises on the Main menu and choose 'Skip Tutorial.'

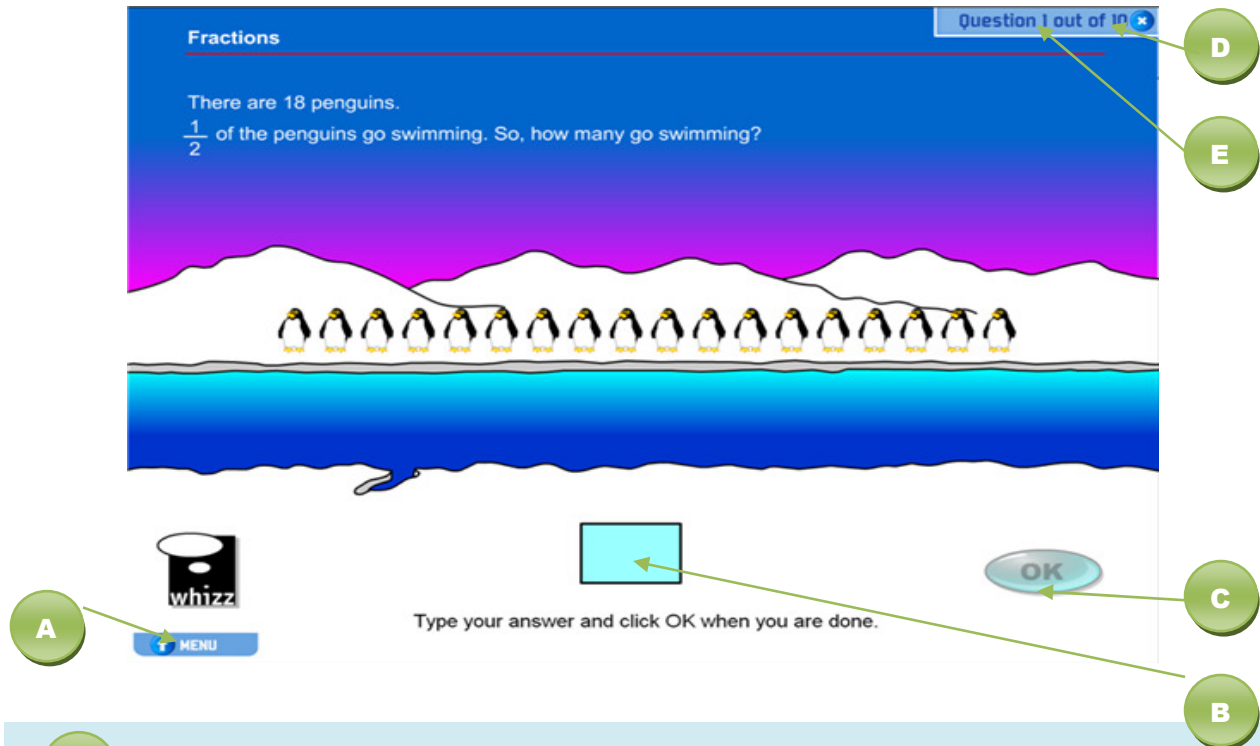
C

The worksheet icon will you to the worksheet correlated to the interactive lesson. Lessons can be printed with or without answers. They are ideal for in class, homework or quizzes.

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Exercises

Move the mouse cursor over the Topic heading to display the **Learning Objective** of the exercise.



A

You can access any of the tools via the menu logo at any time.

B

In exercises that require a written answer, a flashing cursor is usually shown at the point where the answer should be entered. Where there is no cursor, click in an **answer box** and the cursor will appear. In other exercises the mouse should be used to select one of a range of answer boxes or clickable features.

C

The **OK button** should usually be clicked to submit an answer, or to move on to the next stage of the question. Before clicking the **OK button**, the student can change an answer as many times as he / she wishes.

D

Click the **X** in the top right-hand corner of the exercise to end the exercise early and to return to the **Level screen**.

E

A **question counter** is present in all the exercises.

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Most exercises start with **teaching pages**. This section can be used for whole-class presentation as an animated demonstration of the learning objective for that exercise. The teaching pages may also include instructions for the questions that follow.

- ❖ Forward and backward arrows can be used to navigate through this section and to continue to the questions. The backward arrow allows for review of any difficult points encountered in the teaching pages.
- ❖ On starting an exercise, the teaching pages can be skipped all together by clicking on **Skip Tutorial** in the menu.
- ❖ Rapid Recall exercises, which are intended as quick revision exercises, do not generally include teaching pages.
- ❖ In most exercises if a question is initially answered incorrectly, a **help section** will be activated. This will help to lead the student towards the correct answer. The student may then review and re-enter an answer.

Results

The results appear automatically on completion of an exercise, and can also be accessed via the menu at any time. The page will store the results for each exercise completed during the time that Math-Whizz remains open on your computer. For each exercise completed, you will be able to view the percentage of questions answered correctly, the number of times that the help sections were activated and the time taken to complete the exercise.

Saving Results

Student results can be saved into any desired location. To save a student's result, do the following

1. Click **Save** from the **Results view**.
2. Type a filename and choose the appropriate location for the file to be saved.
3. The results will be saved as a **.csv** file.

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Worksheet exercises

Worksheet exercises may be accessed by clicking one of the **worksheet icons** on the level screen. This will display exercise sheets according to the particular topic and teaching level chosen.

Math-Whizz Teachers' Resource Friday, 13 February, 2014 **PRINT** am

Solving Problems - Year 7 answers:

Q1 The line AB is the diameter of each circle. Use the protractor to measure each angle at C.

Q2 Angle at C =

Q3 Angle at C =

Q4 Angle at C =

Q5 Angle at C =

Q6 Angle at C =

Q7 Any triangle drawn on a circle is a right-angled triangle.

Q8 The diameter is always about 3 times greater than the circumference.

Q9

D	C	C + D
3	9.42	<input type="text"/>

Q10

D	C	C + D
6	<input type="text"/>	3.14

Q11

D	C	C + D
<input type="text"/>	10.36	3.14

Q12

D	C	C + D
6.6	20.72	<input type="text"/>

Q13

D	C	C + D
<input type="text"/>	3.14	3.14

Q14

D	C	C + D
7.1	<input type="text"/>	3.14

OK

MENU

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A

Click in the answers box located at the top right hand side of the sheet to display the correct answers. Click this answer box a second time to remove the answers.

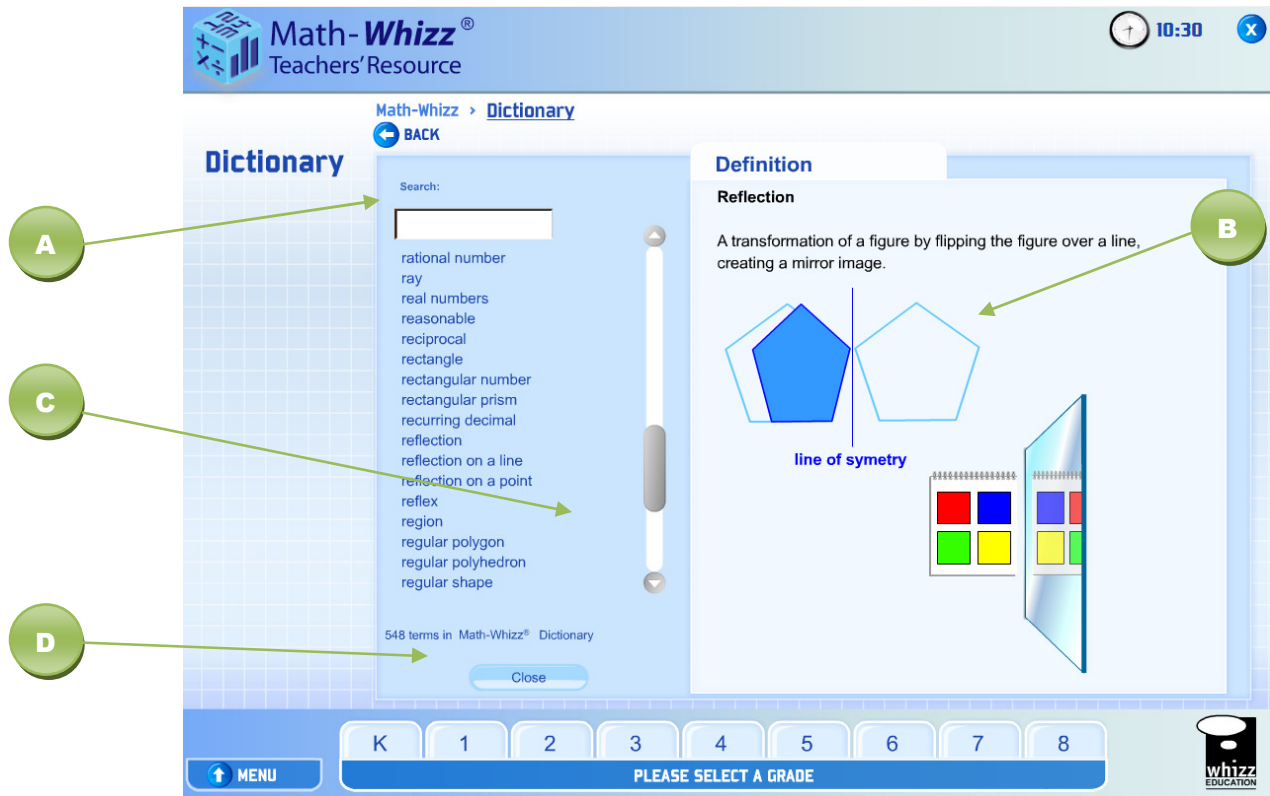
B

Click on the **Print button** at the top of a page to print the exercise. To print the answers, check the answer box prior to selecting Print.

Finding your way around Teachers' Resource

Dictionary

The dictionary provides written and visual definitions of mathematical words that are used in Math-Whizz® exercises. The vocabulary covered in the dictionary complies with NNS Mathematical Vocabulary Book recommendations.



- A** Type the word (or beginning of the word) into the search box.
- B** The **definition** will be displayed in the right-hand window.
- C** Use arrows to scroll through the **word list**, or click on a listed word.
- D** Click on the **Close button** to return to an exercise or **Topic screen**.

Finding your way around Teachers' Resource

Interactive Board

The interactive board comprises a blank area used for teacher demonstration or as a 'working out' space for students. It features dozens of useful tools, arranged in lists launched from the buttons at the bottom of the screen.



2-D Shapes

Select a 2-D shape to place on the board. Click to rotate 2-D shapes.



3-D Shapes

Select a 3-D shape to place on the board. You can click on each of the 3-D shapes to show alternate views and the shape's net.

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Coins

Select your preferred currency then select coins to put on the board.



Color

Select a color to use for the drawing and text tools.



Drawing (Freehand, Line, Square, Circle and Triangle)

Select a drawing tool, and then click on the board and drag to draw the shape. Click and drag the dot to reposition the shape.

The thickness of a shape border or line can be set using the stroke panel, before the shape or line is drawn.



Fractions

Simple fractions: well known fractions have been created to help understand how they work.

Template fractions: click into the box, removing the letter and replacing with a digit of your choice.



Graphs

There are three graphs to choose from: **Bar graph**, **Bar Line Graph** and **Scatter Graph**. Click a graph from the list and position the red dot on the board. The graph will then load and instructions for adjusting it shown.



Numbers

A set of numbers broken down into units, tens and hundreds with symbols to join numbers together.

Number Machine: this machine can work out calculations.

Number Line: this is a template number line which you can edit.



Text tools

The **text tool** allows you to drag a cursor onto the board and start typing, just as you would in a document. Click and drag the dot to reposition the text.

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Tools (Cards, Die, Clocks, Jars/Containers)

Click to pick a tool you want.

Cards: click to shuffle the pack and show a random card;

Die: click to roll;

Clock: position the hands to set the time.

Jars/Containers: click the tap to fill the containers and again to stop, click the arrows to flick through the available containers.

Thermometer: drag the red arrow up the thermometer, then read the value.

Scales: drag the weights onto the scale plates.



Wallpapers

The Interactive Board features many different backgrounds. Select one from the list and this will load into the background as your wallpaper.



Characters

Drag the characters from the list onto the board. Some of the characters may animate.



Finding your way around Teachers' Resource

Experiments

Provide new and imaginative ways to explore mathematical problem solving with real-world scenarios that students see or use almost every day. Experiments require students to gather data, and to use data to solve real world problems collaboratively, or individually. Instruction can be adapted to students at all levels.

Math-Whizz® Teachers' Resource

Experiments
← BACK

Experiments Resources

Experiments are new features which offer new and imaginative ways to explore mathematical problem-solving with real-world objects that students see or use almost every day.

Select a link below to preview an investigation.

- Cereal Box Experiments**
- Cell Phone Experiments**
- Book Experiments**

Math-Whizz Experiments – Cereal Carton

Math-Whizz Experiments are new features of our Math-Whizz Teachers' Resource to help you get the most from our award-winning software and offer new and imaginative ways to explore mathematical problem solving with real-world objects that students see or use almost every day.

Title: Cereal Carton

Descriptions: Investigate the properties of a cereal carton and solve problems related to those properties.

Topic Coverage: Mental Calculation Strategies, Money, Proportion, Measures

Curriculum Coverage: Math-Whizz view, grades 3-7

Equipment: Cereal carton. (For more extensive investigation, use a range of sizes of the same type and brand of cereal, bought from the same store.)

Notes/Type Measure: Weighing scales, Scientific calculator

Data Gathering: The first stage of the experiment is to gather information about the object. Encourage your students to list all the measurable features of the cereal carton and its contents. Discoverable features can be measured directly or determined from information on the Carton.

Table of Information:	Method	Math-Whizz	Unit(s)
Attributes			
Height of Carton (h)	Measure (ruler)	Grade 3 Measures D-2	cm
Width of Carton (w)	Measure (ruler)	Grade 3 Measures B-3	
Depth of Carton (d)	Measure (ruler)	Grade 7 Measures A-3	
Net Mass of cereal Carton (M)	Read	Grade 3 Measures B-3	g
Mass of Carton contents (m)	Measure (scales)	Grade 4 Measures B-3	g
Price of cereal Carton (p)	Read	Grade 3 Measures B-3, C-5	\$, C

Launch Document Fullscreen

PLEASE SELECT A GRADE

A

Teachers can choose from a variety of Experiments. Each experiment can be adjusted for use with students across levels. For more advanced learners, suggestions are provided on how to expand learning.

B

Click “Launch Document Full Screen” for a printable version of the Experiment.

C

Each Experiment links back to the lessons in Math-Whizz that students need to complete tasks in the Experiment. If students have a question, they can be directed back to the lesson in Math-Whizz or the Teacher can use a whole class learning opportunity.